

2. LETTERING

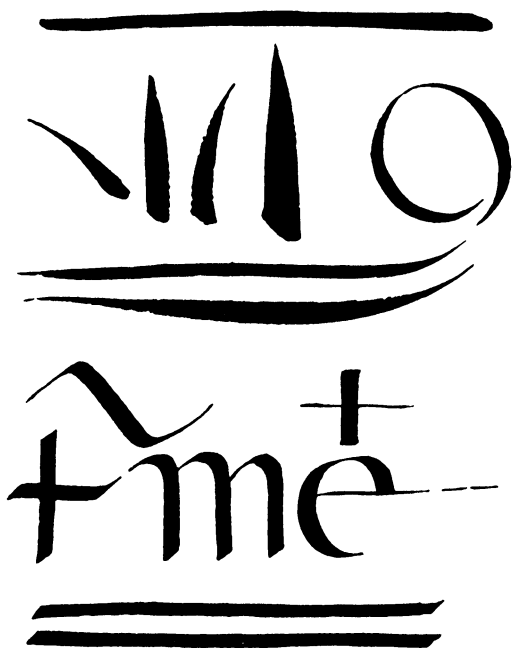
¶ Letters are signs for sounds. Signs for numbers and other things (like the sign for a dollar) may in practice be included, though they are not strictly letters (except as in Roman or Greek numerals & the letter signs used in Algebra). ¶ Letters are not pictures or representations. Picture writing and hieroglyphics are not letters from our point of view; and tho' our letters, our signs for sounds, may be shown to be derived from picture writing, such derivation is so much of the dim and distant past as to concern us no longer. ¶ Letters are not pictures or representations. They are more or less abstract forms. Hence their special and peculiar attraction for the 'mystical mug' called man. More than most things, letters allow him to consider beauty without fear of what the Home Secretary may think or do. Art and morals are inextricably mixed, but the art of lettering is freer from adulteration than most arts; hence among a highly cultured & rational people like the Chinese the high place of calligraphy and inscription. Among the Chinese, good writing is more highly honoured

than painting is with us, as highly perhaps as we honour a successful contraption for boiling soap.

¶ It is a matter of satisfaction, therefore, that, in spite of our preoccupation with merely physical convenience, we have inherited an alphabet of such pre-eminent rationality and dignity as the Roman. A good example is the inscription on Trajan's Column at Rome, of which a plaster cast is in the Victoria & Albert Museum, London. ¶ Lettering is for us the Roman alphabet and the Roman alphabet is lettering. Whatever the Greeks or the Germans or the Russians or the Czecho-Slovaks or other people may do, the English language is done in Roman letters, and these letters may be said to have reached a permanent type about the first century A. D. ¶ Though in the course of the centuries innumerable variations in detail have been made, Roman letters have not changed essentially. Fourteen hundred years after the cutting of the Trajan inscription the tablet in Henry VII's chapel was inscribed, and no Roman would have found any difficulty in reading the letters. Eighteen hundred years after the time of Trajan & four hundred years after Henry VII, Roman letters are still made, and in

almost the same way (e. g. the Artillery Monument, Hyde Park Corner).

¶ But, although the Roman alphabet has remained essentially unchanged through the centuries, customs & habits of work have changed a great deal. In the time of the Romans, say A. D. 100, when a man said the word 'letters' it is probable that he immediately thought of the kind of letters he was accustomed to seeing on public inscriptions. Altho' all sorts of other kinds of lettering existed (on wax tablets, on papyrus, &c.) the most common kind of formal lettering was the inscription in stone. The consequence was that when he made letters 'as well as he could' it was the stone inscription letter that he took as his model. He did not say: Such & such a tool or material naturally makes or lends itself to the making of such and such forms. On the contrary, he said: Letters are such and such forms; therefore, whatever tools & materials we have to use, we must make these forms as well as the tools and material will allow. This order of procedure has always been the one followed. The mind is the arbiter in letter forms, not the tool or the material. This is not to deny that tools and



(Figure 1 shows brush strokes and pen strokes. An ordinary pointed brush held vertically to the paper will of its nature make the strokes shown in the upper part of the figure. The lower part shows the strokes naturally produced by a broad pen, that is thick strokes, thin strokes, and gradations from thick to thin. The engraving is facsimile, & is given to show not good forms or bad, good letters or bad, but simply the forms characteristic of the brush and pen.)

materials have had a very great influence on letter forms. But that influence has been secondary, and

for the most part it has been exerted without the craftsman's conscious intention.

¶ If we admit, as it seems we must admit, that in Roman times the public inscription in stone was the chief model for all forms of letters, we shall expect to find that when they began to make lettering with a pen, on paper or skin, the forms of letters would be imitations of inscription forms; and this is precisely what we do find. A good example is the Vergil in the library of St. Gall, Switzerland. A facsimile may be seen in the *Palæographical Society's Publications*, Series 1, vol. 2, Pl. 208.

¶ Pen writing, even as late as the fourth century, shows very clearly that the scribe had no idea of inventing 'pen' forms of letters, but was simply making as well as he could with a pen what he conceived to be ordinary lettering. Whether he held the pen one way or the other (so that the thick strokes came vertically or horizontally) makes no difference to the primary intention of the scribe. He was not inventing letters; he was writing forms already invented.

¶ But the influence of the tool employed was very great (see figure 1), & in the course of time, owing to the greatly increased use of writings and the

A A A

A λ a a

A a a

A a a

relative decrease in inscriptions, and owing to the increase of speed in writing and the prevalence of hastily scribbled writing, people became familiar

with forms of letters which, tho' meant to be ordinary Roman letters, were considerably different.

¶ Thus in the letter A (see figure 2), to make three separate strokes of the pen was too much for a man in a hurry, & two-stroke A's became familiar.

(Figure 2, reading in the customary order, shows (1) the essential form of A; (2) the same with the customary thick and thin strokes and serifs as made with a brush; (3) the same as incised with a chisel; (4) the same made with a broad pen, three strokes; (4-7) the two-stroke A, as developed between the fourth and fifteenth centuries; (8-10) sixteenth century writing; (11-13) modern forms of the same, suitable for type.)

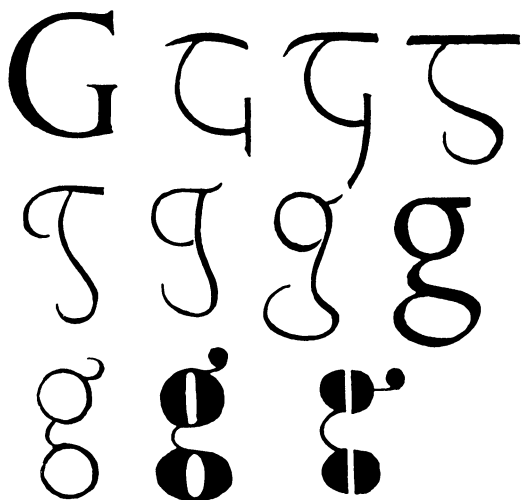
By the seventh century this form was well established, and was as much recognisable as A as the original three-stroke Roman form. ¶ In the same way, the form of serif which was easy to make in stone (which is, in fact, the natural way to finish an incised line neatly) was less natural & less easy with a pen. Penmen took naturally to leaving them out whenever their presence seemed unnecessary.

¶ The influence of the tool is perhaps less obvious in stone inscriptions. Inscription cutting is a slow job anyway. But certain forms are more difficult to cut than others, e. g. a thick line meeting another

at an angle, as in the K. The letter-cutter naturally avoids such things. ¶ Again, take the letter G. The evolution of our modern small g is seen to be chiefly due to the prevalence of & consequent familiarity with hastily scribbled forms (see fig. 3). Nevertheless, in no case does the scribe imagine he is inventing a new form; he is only concerned to make well or ill the form with which he is familiar.

¶ By the sixth century a form of writing obviously more natural to penmanship (see British Museum Harl. MS. 1775) had been evolved. And the process continued until all resemblance to the Roman original was hidden (see B. M. Add. MS. 24585).

¶ I am not concerned to describe in detail the history of the process in its technical and economic significance. The point that chiefly concerns me is that, with whatever tools or materials or economic circumstance (that is hurry & expense), the artist, the letter-maker, has always thought of himself as making existing forms, & not inventing new ones. Thus, the Lombards of the fourteenth century did not sit down and invent Lombardic lettering. The Siennese inscription in the Victoria and Albert Museum, dated 1309, is simply a stone version of the pen letters with which the letter-cutter was fami-



(Figure 3(1–8) shows the evolution of the lower-case *g* from the Roman original. 9–11 are comic modern varieties having more relation to pairs of spectacles than to lettering — as though the designer had said: A pair of spectacles is rather like a *g*; I will make a *g* rather like a pair of spectacles.)

liar. The letter-cutters of the fifteenth century did not invent ‘gothic’. They had the job of cutting stone inscriptions, and they did it in the ordinary letters of their time. The forms of their letters were what we call ‘pen’ forms. But they cared nothing about that. To them they were simply letters. And just as we saw that in Roman times the Roman scribe imitated the stone inscription forms be-

cause, for him, nothing else was letters; so, in the fifteenth century, when the written was the most common and influential form of lettering, the position is reversed, & the letter-cutter copies the scribe — the stone inscription is imitation pen-writing (with such inevitable small modifications as, in stone, cannot be avoided), whereas in the fourth century the written book was an imitation of the stone inscription (with such small modifications as the pen makes inevitable).

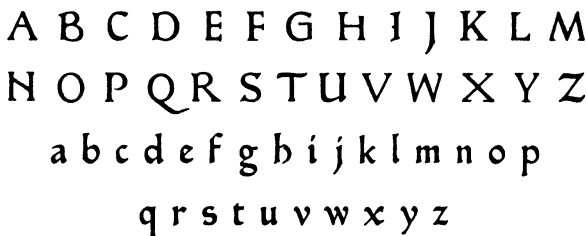
¶ Apart from technical and economic influences the matter is complicated by the differences of individual temperaments and mentalities. Moreover, the physical and spiritual ferment which closed the fifteenth century was accompanied by a revival of interest in and enthusiasm for the things of ancient Greece and Rome, and for the earlier rounder and more legible writing of the ninth & tenth centuries. Nevertheless the first printers were no more the inventors of new letter forms than any other craftsmen had been. The first printed books were simply typographic imitations of pen writing, just as were fifteenth century inscriptions in stone (see fig. 4).

¶ Letters are letters — A is A and B is B — and what we call a gothic A was for Pynson simply A. Print-

ing started in northern Europe, where the gothic forms were the norm. But the centre of culture was



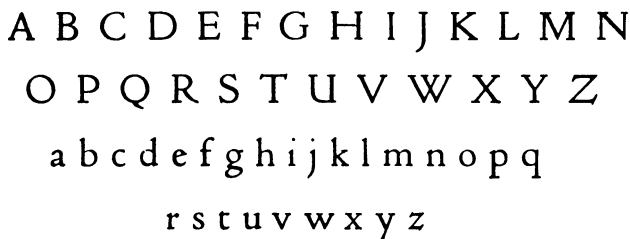
(Figure 4: Caslon's Black Letter. This type, like that of Gutenberg, Caxton, &c., was cut in imitation of fifteenth century northern European handwriting. But though the original was handwriting it was for the first printers simply lettering — the only lettering with which they were familiar, book-lettering.)



(Figure 5: the Subiaco type. This modern version, cut for the Ashendene Press, London, of the type of Sweynheim and Pannartz, 1465, shows the change in style caused by Italian influence.)

not in the North. German printers moved to the South. The influence of Italian letter forms may be

seen in the 'semi-gothic' or 'semi-humanistic' type of Sweynheim and Pannartz (see figure 5). Except in Germany, the gothic forms of letters were generally abandoned. The Italian printers set about the designing of typographic forms of the round, open Italian penmanship (see figure 6). Again they did not invent new forms, but formalised and adapted existing forms to the exigencies of typefounding and printing.



(Figure 6: Jenson's type. This modern version, cut for the Cranach Press, Weimar, of the type of Nicolas Jenson, c. 1490, shows the emancipation achieved both from the gothic of northern Europe and from handwriting generally. Henceforth the designing of type was primarily the work of punch-cutters, that is of engravers. Letters were still reminiscent but no longer an imitation of handwriting.)

¶ The main work having been done by the early Italian printers, the succeeding centuries saw no great changes in the forms of Roman type letters. Such

changes as occurred were no longer due to the influence of hand-driven tools like the chisel or the pen, but were due to the varieties of national tem-

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstu
 vwxyz

Figure 7: Caslon's Old Face, 1734

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 Q R S T U V W X Y Z
 abcdefghijklmnopqrstu
 vwxyz

Figure 8: 'Monotype' Bodoni

per & commerce. For instance, it is said that there is something peculiarly English about Caslon's type (figure 7); and, though there is nothing peculiarly

Italian about Bodoni's type (fig. 8), it is clear that by calling it the first of the modern type faces we are noting the change of character which we associate with the word 'modernity'. Type faces like Caslon's, Baskerville's (fig. 9) or Miller & Richard's Old Style (figure 10) were not assertive enough for nineteenth century commercial printing. The heaviness, i.e. the absence of much contrast in thick and thin, of type faces like Jenson's or Aldus's make them illegible for hurried reading. The needs of commerce & especially of newspaper printers gave a great impetus to the 'modern' type faces. 'Modern face' became the ordinary face, and everything conformed to it. The nineteenth century letter-cutter, as may be seen by nineteenth century tombstones, did his best to do 'modern face' in stone. Engravers & even the writers of illuminated addresses did the same.

¶ The twentieth century is witnessing a reaction. It is a multifold reaction, partly intellectual, partly moral, partly anti-commercial, though commerce is not behind itself in its effort to extract profit even from anti-commercialism. The nineteenth century developed machinery, & machine-makers are now able to supply accurate, though mechanical, imitations of the type faces of the pre-commercial era.

Letters are letters, whether made by hand or by machine. It is, however, desirable that modern machinery should be employed to make letters whose virtue is compatible with their mechanical

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstu
 vwxyz

Figure 9: 'Monotype' Baskerville

ABCDEFGHIJKLMN
 OPQRSTUVWXYZ
 abcdefghijklmnopqrstu
 vwxyz

Figure 10: Miller & Richard's Old Style

manufacture, rather than exact and scholarly resuscitations of letters whose virtue is bound up with their derivation from humane craftsmanship.

¶ While the main stream of lettering has run in typographic channels for the last four hundred years, there has, of course, continued the need of lettering in many other things than books and newspapers. Even handwriting has maintained its existence, & the style of letter called italic still preserves its 'cursive' character. Most italic type faces, however, (see figure 11, 5) are too sloping and too cursive. There is a great need of a narrow and less sloping letter, which, while giving emphasis and difference, shall be of the same noncursive character as the upright letters they are used with. Both the Perpetua (fig. 11, 3) and the Joanna italics (figure 11, 4) are so designed, and the latter having only a very slight slope is used with the upright capitals. The Joanna 'italic' was designed primarily to be used by itself, i. e. as a book face and not simply as a letter to be used for emphasis.

¶ The same excessively cursive quality as afflicts Italic has always afflicted Greek types (fig. 11, 7). For some reason or other, probably the comparative rareness of Greek printing, the leaders of

typographic design in the fifteenth century never achieved for Greek what they did for Latin & modern languages. That the thing is possible is shown

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

a b c d e f g h i j k l m n o p q r s t u v w x y z

a b c d e f g h i j k l m n o p q r s t u v w x y z

a b c d e f g h i j k l m n o p q r s t u v w x y z

abcdefghijklmnopqrstuvwxyz

A B Γ Δ E Z H Θ I K Λ M N Ξ O Π P Σ T Υ Φ X Ψ Ω

α β γ δ ε ζ η θ ι κ λ μ ν ξ ο π ρ σ τ υ φ χ ψ ω

A B Γ Δ E Z H Θ I K Λ M N Ξ O Π P Σ T Υ Φ X Ψ Ω

α β γ δ ε ζ η θ ι κ λ μ ν ξ ο π ρ σ τ υ φ χ ψ ω

(Figure 11: 1 and 2, Perpetua Roman capitals and lower-case; 3, Perpetua italic; 4, Joanna italic; 5, Caslon Old Face italic; 6 & 7, Porson Greek capitals & lower-case; 8 & 9, Perpetua Greek capitals and lower-case.)

by what the Emperor Peter the Great did in the case of Russian writing. The Russian alphabet is closely related to the Greek. The formalisation of Russian script was achieved very successfully by the Dutch typographers employed by Peter the Great; & the same thing could be done for Greek. ¶ Many varieties of Greek types exist, but for the most part they are more italic than the Italics. In recent years at-

tempts have been made at improvement, but no attempt has been made to take advantage of the fact that Greek capitals have always been made in the same way as Roman capitals. Instead of keeping the capitals as they are and designing a lower-case to match, reformers have always proceeded in the opposite way and altered the capitals to match an improved and less cursive lower-case. The Perpetua Greek (fig. 11, 8 and 9) is the first example of an attempt to do for Greek what Peter the Great did for Russian and Jenson and others did for Latin. Just as the capitals of the Perpetua Greek are of precisely the same family as Perpetua Roman, so the Perpetua Greek lower-case is of the same family as the Perpetua Roman lower-case. The letter & serif formation is uniform throughout. ¶ Letters are letters. A is A, and B is B. The letter-maker of the twentieth century has not got to be an inventor of letter forms but simply a man of intelligence & good will. ¶ Whether in stone, wood, paint or metal

The common problem, yours, mine, everyone's,
Is — not to fancy what were fair in life
Provided it could be — but, finding first
What may be, then find how to make it fair

& the word fair can be taken in both senses — it means both beautiful and just.

¶ As the Roman, when he thought of lettering, thought of inscription letters; as the medieval man thought of written letters; so in the twentieth century, when we write a letter carefully we call it 'printing'. The printed letter is lettering for us.

¶ But there are many forms of printed letter which do not seem entirely satisfactory. One of the commonest forms of unsatisfactoriness is due to the unnecessary and therefore unreasonable mixing of many different sorts of letters on the same page or in the same book. It is a safe rule not to mix different styles of letters on the same page, or different faces of type in the same book. A book printed in an inferior type will be better if that inferior type be strictly kept to than if other and even better types be mixed in with it.

¶ The business of poster letters (see figure 12) has not yet been extricated from the degradations imposed upon it by an insubordinate commercialism. Mere weight and heaviness of letter ceases to be effective in assisting the comprehension of the reader when every poster plays the same shouting game. A man at whom twenty brick manufacturers throw

A DEMON WHO LIVES ON THE DEAD

(Figure 12 is a reduced copy of a 'John Bull' poster. It shows how the desire to arrest attention by making the letters as black as possible defeats the object of the poster, i. e. quick legibility. For from a very short distance the letters are indistinguishable.)

bricks from every side at once is quite unable to distinguish the qualities in which 'Blue Staffordshires' are superior to 'London Stocks'. A return to mere

A DEMON WHO LIVES ON THE DEAD

(Figure 13 shows a poster letter designed to give the maximum blackness compatible with quick legibility and a rational differentiation between the letters, e. g. the D & O.)

legibility (see fig. 13) seems desirable even if the effect be less striking. To this end it is necessary to study the principles of legibility — the characters which distinguish one letter from another, the proportions of light and dark in letters and spacing.

¶ A square or oblong with its corners rounded off may, by itself, be more like an O (see fig. 14) than anything else, but in conjunction with a D made on the same principles there is not much by which to recognise which is which, and from a distance the two are indistinguishable. Many engineers affect this style of letter, believing it to be devoid of that 'art-nonsense' on the absence of which they pride themselves. That newspaper-vendors should use the same style of letter is even more surprising. If the aims of engineers and newsagents were purely decorative, we could more easily appreciate their efforts, even though, to our more rational minds, names on locomotives and advertisements of the contents of more or less untrustworthy journals seem alike unnecessary.

¶ Legibility, in practice, amounts simply to what one is accustomed to. But this is not to say that because we have got used to something demonstrably less legible than something else would be if we could get used to it, we should make no effort to scrap the existing thing. This was done by the Florentines and Romans of the fifteenth century; it requires simply good sense in the originators & good will in the rest of us. ¶ Good will

seems to be the common possession of mankind, but its complement, good sense, i.e. intelligence, critical ability, and that intense concentration upon precise perfection which is a kind of genius,



(Figure 14: 1 & 2 show the engineers' O & D, hardly distinguishable from one another; 3 & 4 show forms equally black, no wider, but more legible, which are suitable where the space required for the normal, 5 & 6, is not available.)

is not so common. Good will comes from below & occasionally penetrates into studios and cabinets. Good sense comes from above & percolates thro' the mass of people. Everybody thinks that he knows an A when he sees it (fig. 16); but only the

few extraordinary rational minds can distinguish between a good one & a bad one, or can demonstrate precisely what constitutes A-ness. When is an A not an A? Or when is an R not an R (fig. 17)? It is clear that for any letter there is some sort of norm. To discover this norm is obviously the first thing to be done.



Figure 15: Monotype sans-serif

¶ The first notable attempt to work out the norm for plain letters was made by Mr Edward Johnston when he designed the sans-serif letter for the London Underground Railways. Some of these letters are not entirely satisfactory, especially when it is remembered that, for such a purpose, an alphabet should be as near as possible ‘fool-proof’, i.e. the forms should be measurable, patient of dialectical

exposition, as the philosophers would say — nothing should be left to the imagination of the signwriter or the enamel plate maker. In this quality of ‘fool-proofness’ the Monotype sans-serif face (figure 15) is perhaps an improvement. The letters are more strictly normal — freer from forms depending upon appreciation and critical ability in the workman who has to reproduce them.

¶ But, as there is a norm of letter form — the bare body so to say, of letters — there is also a norm of letter clothes; or rather there are many norms according as letters are used for this place or purpose or that. Between the occasion wherein the pure sans-serif or mono-line (block) letter is appropriate & that in which nothing is more appropriate than pure fancifulness (see fig. 17, 9, 13, 15 & 16), there are innumerable occasions.

¶ A typically moral and conscientious Englishman finds it exceedingly difficult to keep morals out of art talk; he finds himself inclined to think, e.g. that R ought to have a bow more or less semi-circular and of a diameter about half the height of the stem, & a strongly outstanding tail; that an R with a very large bow and hardly any tail at all is wrong. But such moral notions as the word ‘ought’ implies, &

such words as 'right' & 'wrong' — taken as having a moral connotation — are obviously absurd in such a discussion, and we should be ready to admit that any old shape will do to make a letter with. Nevertheless, special circumstances demand special treatment, and as a 'confirmed drunkard' may be well advised to 'take the pledge' & deck himself out with blue ribands, so, seeing the whirl of eccentricity into which modern advertising is driving us (fig. 18),

(Fig. 16 : 1, essential form; 2, too narrow; 3 & 4, absurd misconceptions; 5 & 6, normal; 7, overbold; 8, suitable for advertisements of 'Bovril'; 9, normal sans-serif; 10, sans bold; 11, sans overbold; 12, hardly recognisable; 13 & 14, thick and thin unusually disposed; 15, A undecided as to whether it is an A or an aitch; 16 and 17, normal; 18, top-heavy; 19, a decent variation; 20, a poor thing but might be worse; 21, a fancy possibility; 22, essential form of lower-case a; 23, normal type form; 24, Victorian vulgarity; 25, comic variety; 26–29, A's that are not A's.)

it seems good and reasonable to return to some idea of normality, without denying ourselves the pleasure and amusement of designing all sorts of fancy letters whenever the occasion for such arises. Moreover, it seems clear that as a firm and hearty belief in Christian marriage enables one not only



Figure 16

to make the best jokes about it but even to break the rules with greater assurance (just as a man who knows his road can occasionally jump off it, whereas a man who does not know his road can only be on it by accident), so a good clear training in the making of normal letters will enable a man to indulge more efficiently in fancy and impudence.

(Figure 17 : 1, normal sans-serif; 2-5, unseemly abnormalities & exaggerations; 6, normal with serifs; 7, normal bold; 8, overbold and fatuous; 9-13, 15 and 16, seemingly 'fancy' varieties of the normal; 14 & 17, R's with normal bows but tails badly attached.)

¶ But under an industrial system, such as we have in England to-day, the majority of workmen are deprived, not by cruel masters, but by the necessary conditions of machine production, of the ability to exercise any fancy or impudence at all, & are even deprived of any appetite so to do. Fancifulness is therefore within the competence of a smaller and smaller number of workmen. We shall shortly have a situation wherein all jokes and eccentricities are the work of 'designers' — and machine-made jokes reproduced by the million tend to be boring. ¶ The kind of figure 2 shown in fig. 19, or the r's in fig. 20, with violently contrasted thick & thin forms & enor-

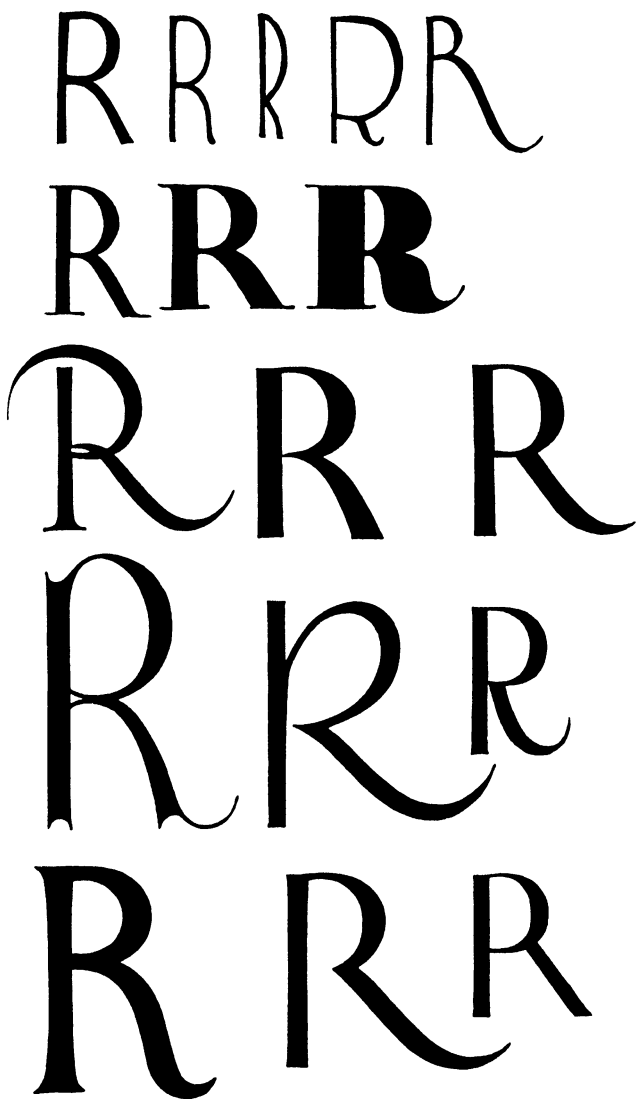


Figure 17

mous blobs might be amusing to meet if they were the unaided efforts of some sportive letter designer. But having become common forms they are about as dull as 'Robots' would be if they all had red noses. As machinery & standardised production can only decently turn out the plainest of plain things, we shall have to steel our minds to a very ascetical and mortified future. This will be quite satisfactory to 'highbrows' like ourselves, but it is certain that the masses of the people will not stand it; & designers, who for inscrutable reasons 'must live', will continue to fall over one another in their efforts to design fancy forms which, like a certain kind of figure 9, are all tail and no body (see figure 19, 24).

¶ However, in spite of industrialism, letter designing is still an occupation worthy of the enthusiasm of rational beings, and, though a Q which were all queue & no Q would be 'past a joke', it is difficult to say exactly where a tail should end (see figure 21). The only thing to do is to make ourselves into such thoroughly and completely rational beings that our instinctive or intuitive reactions and responses and sympathies are more or less bound to be rational also. And just as we revolt from smells which are bad for our bodies without reasoning about it, so

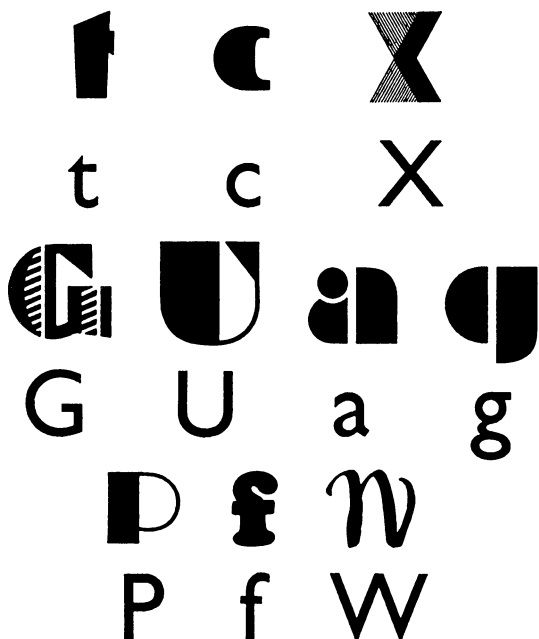


Figure 18

shall we revolt against the mentally defective.

¶ A final word may be said about the influence of tools in letter designing. The main stream of lettering to-day is undoubtedly the printed sheet or book. But whatever may be said about the derivation of our letters from the chisel-made or pen-made letters of the past, there is no doubt whatever that neither the chisel nor the pen has now any influ-

ence at all. Even the influence of the tools of the punch-cutter is now practically negligible. But a very considerable influence is exerted by the natures of type-metal and type-setting. The short-tailed Q is obviously the result of such influences. Paper also exerts a big influence. The very even & smooth surfaces of modern machine-made papers have given a spur to the designing of type-faces with very finely cut and finished serifs. Influences such as these are obvious, but they are of a very different kind from those exerted by the shapes and usages of chisels and pens.

(Figure 19 : 1, 5, 9, 13, 17, and 21, normal forms; the remainder shows various exaggerations; 8 is a common form of vulgarity; 10 & 11 are common misconceptions; 22 and 24 are copies of figures actually seen in advertisements.)

¶ Apart from printing, the lettering of the world is very small in quantity, and therefore such tools as the graver, the brush and the pen and the chisel are negligible, regarded as powers for influencing the forms of letters. The copybook of to-day is the printed page. But this is not to say that one craft should laboriously imitate the technicalities of another, or that small & inessential details which are appropriate in one material should be copied in an-

2 2 2 2

2 2 2 2

4 4 4 4

3 3 3 3

6 6 6 6

9 9 9 9

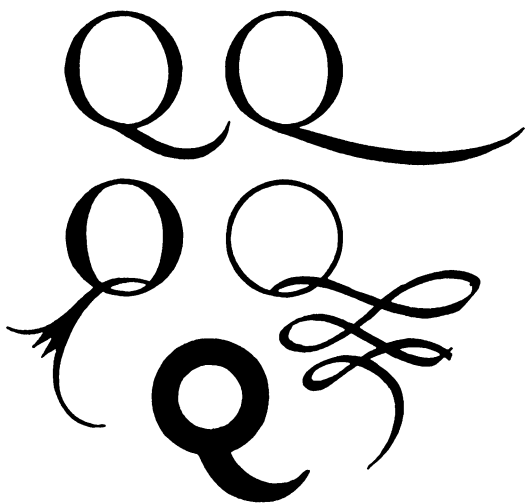
Figure 19

other for which, may be, they are not at all appropriate. It is simply to say that in considering what forms constitute this or that letter the mind, not the tool, is the arbiter; and the mind, as regards lettering, is informed by the printed page.

¶ In spite of this we have a tradition of handwriting which seems to pay little or no attention to either printed or painted letters, & we have copper-plate engraving of visiting cards and such-like in a style of lettering only remotely related to typography and apparently quite independent. In all the various lettering trades there is little or no conscious reference to printing, & at all times there have been subsidiary traditions carrying on apparently independently of the main stream. Court hands, lawyers' hands, ecclesiastical hands and so forth, have gone on in their own sweet way without any apparent sign of being influenced by whatever was the main stream of their time. But this independence is only apparent. These various by-paths either wander away & are lost, the trades with which they are connected die out, or the force of the main stream drags them back. Modern handwriting & copper-plate printing are both in this predicament. Modern handwriting, if it is to be reformed at all, must be



(Figure 20 : 1, normal; 2, a possible variety; 3 & 4. Egyptian elephantiasis, commonly seen but uncommonly bad — except in this diagram.)



(Figure 21 shows various possible varieties of tails.)

reformed by the application of a good knowledge of the technique of penmanship to a knowledge of good printing, & not by the resuscitation of mediæval calligraphy. ¶ Modern signwriting & engraving must toe the same line; & in inscription carving, while we may remember Trajan lovingly in the museum, we must forget all about him in the workshop.



(Figure 22 illustrates the contention that slope in either direction does not deprive capitals, lower-case or italics of their essential differences.)